

Title

Orthodontic Awareness and Knowledge Among the General Population: A Survey-Based Study

Abstract

Orthodontic awareness plays an important role in promoting oral health and encouraging timely treatment of dental irregularities. This study aimed to assess the level of orthodontic awareness and knowledge among members of the general population. A cross-sectional survey was conducted using a Google Forms questionnaire consisting of 15 multiple-choice questions. A total of 50 participants completed the survey voluntarily and anonymously.

The results showed that 66% of respondents had heard of orthodontics, while 94% were familiar with braces. Most participants correctly identified the purpose of braces and recognized the impact of crooked teeth on oral health. However, variations in knowledge were observed regarding the ideal timing of orthodontic treatment. Cost was identified as the most significant barrier to seeking treatment, while social media was reported as the primary source of information. The majority of participants also supported increased oral health education in schools.

The findings indicate that although awareness of basic orthodontic concepts is relatively high, important knowledge gaps remain. Enhanced public education and awareness programs may help improve understanding of orthodontic treatment and encourage timely access to care.

Keywords: Orthodontics, Orthodontic Awareness, Oral Health, Braces, Malocclusion, Dental Education, Survey Research.

Introduction

Orthodontics is a specialized branch of dentistry concerned with the diagnosis, prevention, and treatment of malocclusions and irregularities in the alignment of teeth and jaws. Orthodontic treatment not only improves dental aesthetics but also contributes to better oral health, proper chewing function, speech development, and overall quality of life. Common orthodontic treatments include braces, clear aligners, and other corrective appliances designed to improve dental alignment and jaw relationships.

Despite the importance of orthodontic care, many individuals remain unaware of the causes, consequences, and treatment options associated with malocclusion. Limited awareness may delay treatment-seeking behavior, resulting in complications that could have been prevented through early intervention. Public knowledge regarding the appropriate age for treatment, the benefits of orthodontic care, and the relationship between oral health and dental alignment plays a significant role in determining whether individuals seek professional dental advice.

Awareness of oral health is an important component of preventive healthcare. Individuals with adequate knowledge about dental conditions are more likely to maintain proper oral hygiene practices, attend routine dental check-ups, and seek treatment when necessary. Educational initiatives delivered through schools, healthcare professionals, social media platforms, and community programs can significantly influence public understanding of oral health and orthodontic treatment.

Previous studies conducted in different countries have reported varying levels of orthodontic awareness among different age groups and populations. Factors such as age, gender, socioeconomic status, educational background, and access to dental services have been shown to influence awareness and attitudes toward orthodontic treatment. However, gaps in knowledge continue to exist, highlighting the need for further research and public education.

Therefore, the present study was conducted to assess the level of orthodontic awareness and knowledge among members of the general population. The study also aimed to explore participants' understanding of orthodontic treatment, identify common sources of information, and examine perceived barriers that may influence access to orthodontic care. The findings may contribute to a better understanding of current awareness levels and help support future oral health education initiatives.

Literature Review

Previous research has demonstrated that awareness of orthodontic treatment varies considerably among different populations. Liu and Qiao (2026) reported that over 40% of individuals were unaware that the optimal timing for orthodontic treatment depends on the specific type of malocclusion. Similarly, Mishra et al. (2022) found that more than half of the population lacked awareness regarding the scope of orthodontic treatment, limiting their likelihood of seeking professional care. Adyasti et al. (2021) observed moderate awareness among adolescents, with females generally demonstrating higher levels of awareness than males. Likewise, Pandey et al. (2014) reported moderate awareness of orthodontic procedures and their benefits.

Several studies have identified demographic and socioeconomic factors that influence orthodontic awareness and treatment-seeking behavior. Cigerim and Erhamza (2012) concluded that age, gender, and socioeconomic and sociocultural factors significantly affect orthodontic awareness. Patil et al. (2014) further reported that socioeconomic status, awareness of malocclusion, dissatisfaction with dental appearance, and perceived treatment need influence the uptake of orthodontic care. Ganapathy and Sasanka (2020) found that although many individuals understood the importance of early treatment, socioeconomic barriers and limited resources often prevented treatment from being pursued.

Research has also highlighted deficiencies in awareness among specific groups. Farooq and Shah (2023) found that school teachers in Pakistan lacked sufficient knowledge regarding orthodontic treatment, appropriate treatment timing, and payment options. Koufatzidou et al. (2019) reported that although pediatricians recognized the importance of oral examinations, many lacked adequate knowledge to consistently identify orthodontic problems and provide timely referrals. Similarly, Vajifaker et al. (2019) and Faizee et al. (2018) emphasized the need for greater awareness among young adults regarding orthodontic treatment options and the consequences of untreated malocclusion. Furthermore, Mardianti et al. (2020) highlighted that dental health knowledge remains highly variable among older adolescents and young adults, reinforcing the need for targeted educational campaigns.

The psychological and social impact of orthodontic conditions has also been examined. Spalj et al. (2010) reported that malocclusion affects emotional well-being more significantly than functional or social aspects of life. Kamarozaman et al. (2021) found that aesthetic concerns remain the primary motivation for seeking orthodontic treatment, although they also emphasized the importance of educating adolescents about unsafe practices such as the use of fake braces.

Numerous studies have emphasized the importance of oral health education in improving awareness and preventive behaviors. Bakhtiar et al. (2025) demonstrated that multimedia-based educational approaches can effectively improve oral health knowledge among teenagers. Das et al. (2017) highlighted the need for structured oral health education programs, while Dumitrache et al. (2016) stressed the importance of increasing awareness regarding diet and regular dental check-ups. Rusyan et al. (2022) further recommended early examinations, educational interventions, and preventive care, particularly among lower socioeconomic groups.

Additional evidence suggests that poor oral health knowledge may contribute to delayed treatment-seeking behavior. Bhola and Malhotra (2014) reported that inadequate knowledge, fear, and limited access to care often discourage young individuals from seeking dental treatment. Mane et al. (2018) similarly observed that rural populations frequently value facial appearance but possess limited knowledge of modern orthodontic treatment options. Although Hamp et al. (1982) found no consistent relationship between dental knowledge and oral health outcomes, most contemporary studies support the view that increasing awareness and education can positively influence oral health behaviors and treatment decisions.

Overall, the existing literature suggests that awareness of orthodontics remains moderate in many populations and is influenced by demographic, socioeconomic, educational, and psychological factors. Previous studies consistently highlight the need for improved oral health education, earlier intervention, and increased public awareness regarding the benefits and availability of orthodontic treatment.

Methodology

A cross-sectional survey design was utilized to evaluate orthodontic awareness, knowledge, and perceived barriers among members of the general public. Data collection occurred over a two-week period from May 31, 2026, to June 12, 2026. This study was conducted entirely as an independent research project. The primary instrument for data collection was a digital questionnaire consisting of 15 multiple-choice questions hosted on Google Forms. A convenience and snowball sampling strategy was employed for participant recruitment. To reach a diverse demographic, digital outreach was conducted by distributing the survey link across multiple online platforms, including Reddit, Quora, Threads, Facebook Groups, WhatsApp networks, and specialized academic survey-sharing platforms such as SurveySwap and SurveyCircle. Additionally, direct outreach was conducted via cold emails sent to 50 professional dental clinics, resulting in two positive responses where a survey QR code was provided for distribution. A final sample size of 50 participants aged 10 and older participated voluntarily and anonymously, ensuring data privacy and confidentiality.

Results

A total of 50 participants completed the survey on orthodontic awareness and knowledge.

Demographic Characteristics

Among the respondents, the largest age group was 15–20 years (36%), followed by 20–25 years (32%), 25+ years (18%), and 10–15 years (14%).

Regarding educational background, 56% of participants attended private schools, 32% attended public/government schools, 10% attended international schools, and 2% selected other educational institutions.

The majority of respondents were female (64%), while 34% were male and 2% preferred not to disclose their gender.

Most participants resided in urban areas (82%), followed by suburban areas (10%), rural areas (6%), and other areas (2%).

Awareness of Orthodontics and Braces

A majority of participants (66%) reported that they had heard of orthodontics, while 26% had not heard of orthodontics and 8% were unsure.

Awareness of braces was considerably higher, with 94% of respondents indicating that they had heard of braces and only 6% reporting no prior awareness.

When asked about the primary purpose of braces, 98% correctly identified braces as being used for straightening teeth, while only 2% selected incorrect responses or reported uncertainty.

Knowledge of Orthodontic Treatment

Most respondents demonstrated awareness of the relationship between dental alignment and oral health. A total of 78% agreed that crooked teeth can affect oral health, 18% were unsure, and 4% believed that crooked teeth do not affect oral health.

Regarding the appropriate age to begin orthodontic treatment, 50% selected the teenage years, 40% selected childhood, and 10% reported that they did not know.

When asked whether orthodontic treatment is only for cosmetic purposes, 76% correctly disagreed with the statement, 20% were uncertain, and 4% agreed.

(See Appendix: Figure 1 for visual data)

Attitudes Toward Orthodontic Care

Slightly more than half of the respondents (52%) reported having visited an orthodontist, while 48% had never visited one.

When asked whether they would consider orthodontic treatment if recommended by a dentist, 64% responded positively, 32% indicated “maybe,” and 4% stated that they would not consider treatment.

Sources of Information and Perceived Barriers

Social media was the most commonly reported source of oral health information (46%), followed by dentists (38%), family members (12%), and schools (4%).

(See Appendix: Figure 2 for visual data)

Participants identified cost as the greatest barrier to orthodontic treatment (54%). Other reported barriers included lack of awareness (26%), fear of treatment (14%), and lack of access to care (6%).

(See Appendix: Figure 3 for visual data)

Oral Health Education

Most respondents (76%) believed that schools should provide more oral health education. In contrast, 16% were unsure, while only 8% disagreed with the statement.

Discussion

The present study assessed orthodontic awareness and knowledge among 50 participants from diverse demographic backgrounds. The findings indicate that awareness of braces was

generally high, with 94% of respondents reporting familiarity with braces. However, awareness of orthodontics as a specialized field was lower, with only 66% of participants indicating that they had heard of orthodontics. This suggests that while many individuals recognize orthodontic appliances, they may have limited knowledge of the broader field of orthodontic care.

The findings are consistent with previous studies that reported moderate levels of orthodontic awareness. Adyasti et al. (2021) and Pandey et al. (2014) similarly observed moderate awareness among adolescents and young adults. Furthermore, Mishra et al. (2022) reported that a substantial proportion of the population remains unaware of the full scope of orthodontic treatment, supporting the findings of the present study.

Knowledge regarding the purpose of braces was generally strong, with 98% of respondents correctly identifying that braces are primarily used to straighten teeth. Additionally, 78% of participants recognized that crooked teeth can negatively affect oral health. These findings indicate a reasonable understanding of basic orthodontic concepts among respondents.

When participants were asked about the ideal age for orthodontic treatment, responses varied. Although half of the respondents identified the teenage years as the most appropriate period for treatment, a considerable proportion selected childhood or expressed uncertainty. This finding aligns with Liu and Qiao (2026), who reported that many individuals lack knowledge regarding the appropriate timing of orthodontic intervention.

The study also identified several barriers to orthodontic treatment. Cost was reported as the most significant obstacle by more than half of the respondents. Lack of awareness, fear, and limited access to care were additional barriers. These findings support the observations of Ganapathy and Sasanka (2020), who highlighted socioeconomic limitations and inadequate awareness as important factors preventing individuals from receiving orthodontic treatment.

Social media emerged as the most common source of information regarding oral health and orthodontics. This finding reflects the growing influence of digital platforms on public health education. Similar conclusions were reported by Bakhtiar et al. (2025), who demonstrated that modern educational technologies and multimedia resources can effectively improve oral health knowledge among young people.

The majority of respondents also expressed support for increased oral health education in schools. This finding is consistent with recommendations from Das et al. (2017), Dumitrache et al. (2016), and Rusyan et al. (2022), who emphasized the importance of structured educational programs in improving oral health awareness and preventive behaviors.

Despite providing valuable insights, this study has several limitations. The sample size was relatively small, and the majority of respondents were from urban areas, which may limit the generalizability of the findings. In addition, data were collected through self-reported responses, which may be influenced by individual interpretation and response bias.

Overall, the findings suggest that while awareness of braces and basic orthodontic concepts is relatively high, important gaps remain in public knowledge regarding orthodontics, treatment timing, and access to care. Continued educational efforts and public awareness initiatives may help improve understanding and encourage timely orthodontic consultation and treatment.

Conclusion

This study assessed the level of orthodontic awareness and knowledge among members of the general population through a cross-sectional survey involving 50 participants. The findings revealed that awareness of braces was generally high, and most respondents demonstrated a basic understanding of the purpose of orthodontic treatment. However, gaps in knowledge were identified regarding orthodontics as a specialized field, the ideal timing of treatment, and factors influencing access to care.

Cost, lack of awareness, and fear were identified as important barriers to seeking orthodontic treatment. Social media emerged as the most common source of information, highlighting its growing role in public health education. Furthermore, most participants supported the inclusion of additional oral health education in schools.

The findings suggest that although awareness of basic orthodontic concepts is relatively good, further educational efforts are needed to improve public understanding of orthodontic treatment and oral health. Future studies involving larger and more diverse populations may provide a broader understanding of orthodontic awareness and help guide effective educational initiatives.

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Figure 1: Respondent agreement levels regarding whether orthodontic treatment is solely for cosmetic purposes.

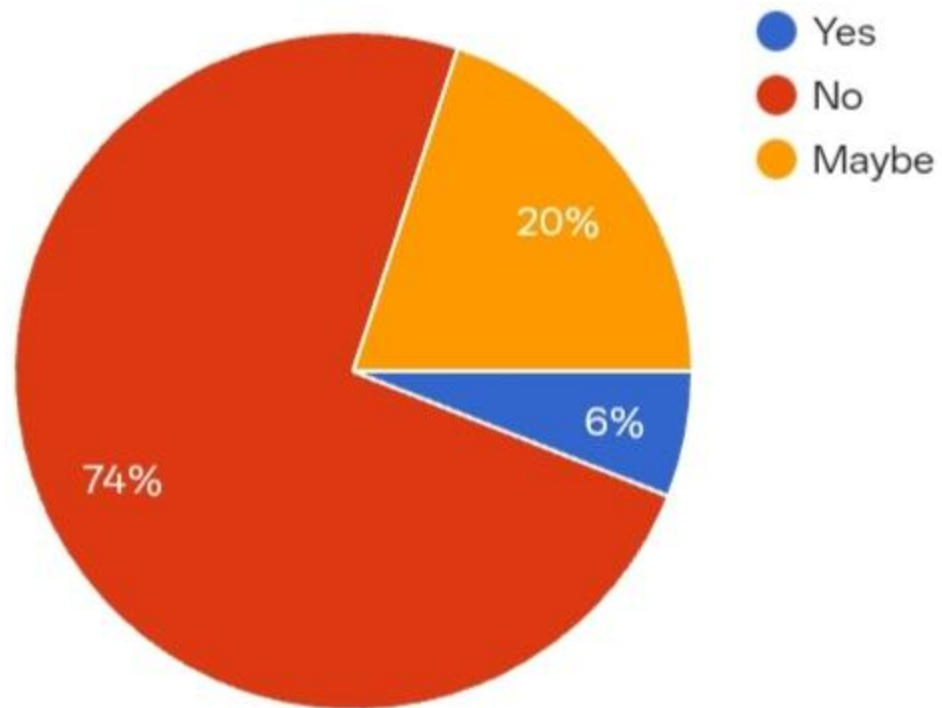


Figure 2: Primary channels and sources of oral health information among respondents.

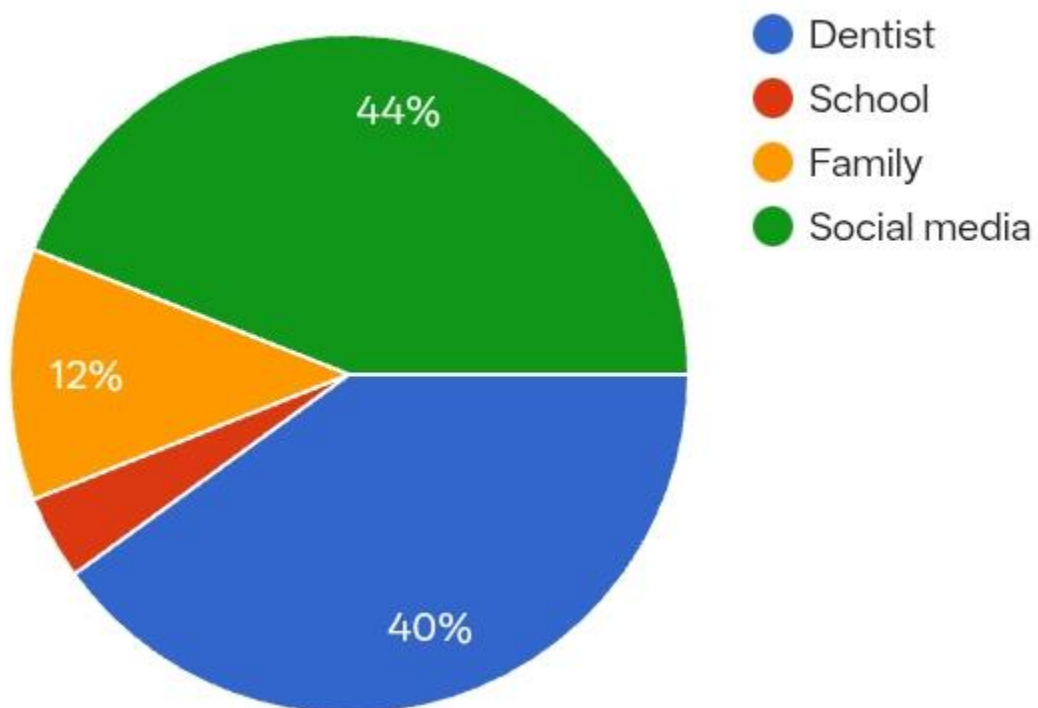


Figure 3: Perceived barriers and obstacles influencing public access to orthodontic care.

